UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,537	04/27/2001	Robert W. Baxter	9266-2	3743

20792	7590	11/07/2003	

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EXAMINER
CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.		Applicant(s)	
Office Action Summary	09/844,537		BAXTER ET AL.	
	Examiner		**Art Unit**	
	Jean M Corrielus		2172	

-- The MAILING DATE of this communication appears on the cover sh et with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _29 September 2003_ .

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-33_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _1-5,12-16 and 23-27_ is/are rejected.

7) ☒ Claim(s) _6-11,17-22 and 28-33_ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1.   This office action is in response to the request for reconsideration filed on September 29,

2003, in which claims 1-33 are presented for further examination.

Response to Arguments

2.   Applicant's arguments filed September 29, 2003 (paper no.5) have been fully considered but

they are not persuasive. See Examiner's remark.

Information Disclosure Statement

3.   The information disclosure statement (IS) filed on April 27, 2001 complies with the provisions

of M.E.P.. § 609. It has been placed in the application file. The information referred to therein has

been considered as to the merits. (See attached form).

Claim Rejections - 35 U.S.C. § 112

4.   Claims 1-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the

invention. Claims 1, 12 and 23 recite "detecting the stored command in the database". It is unclear

as to why one having ordinary skill in the art at the time the invention was made to detect a stored

command, when the commands are previously stored in the database by those having ordinary skill

in the art. Can it be possible that the step of "detecting the stored command in the database" would

as --requesting the stored command in the database--. Clarification with regard to the above

mentioned is required.

Claim Rejections - 35 U.S.C. § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-5, 12-16 and, 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Eidson US Patent no. 5,923,557.

As to claims 1, Eidson discloses the claimed limitations "storing a command for the

controller in a database, wherein the command is selected from a group of commands consisting

of a write command that is configured to write a value of a real-time process control variable to

the controller and read command that is configured to read a value of a real time process control

variable from the controller" where the device specific information in the database includes a set

of device specific information for each of the process control devices detected by the mapping

processor, wherein the device specific information for a particular process control device includes

information such as the number of variables associated with the process control device, the

triggering requirement, wherein in general, each variable associated with a process control device

maps to a channel (col.4, lines 55-65). Eidson does not explicitly disclose the use of detecting the

stored command in the database. Eidson, however discloses the use of obtaining a set of

information pertaining to the process control wherein the information described the process

control according to the predetermined device oriented protocol that corresponds to the standard

interface (col.2, lines 55-62; col.4, lines 28-40 and 55-65). Eidson discloses also the use of

"retrieving the stored command from the database responsive to detecting the stored command"

as retrieving the device specific information from the external network server that contains the

dictionary (col.6, lines 3-15); and "sending the retrieved command to the controller" as a way of

passing the information to the mapping processor which writes it into the database (col.6, lines 3-

32). Therefore, it would have been obvious to one of ordinary skill in the art of data processing,

at the time the present invention was made to modify the teachings of Eidson, wherein the process

control system, provided therein (See Eidson's fig.3) would incorporate the use of detecting the

stored command in the database, as the same conventional manner of detecting the device

connected to the field bus depends on the predetermined protocol of the field bus, as disclosed by

Eidson (col.2, lines 55-62; col.4, lines 28-40 and 55-65). Such modification would provide

Eidson's system the enhanced computing ability for enabling the application controller to

communicate with the process control, thereby controlling the correspondence process control,

decreasing the difficulty and cost of maintaining the process control system. securing information

delivery, thereby authorizing locations, and tracking and updating the status the information data.

As to claims 2, Eidson discloses the claimed limitation "verifying that the stored command is a valid command for the controller" as obtaining information such as the triggering requirement (col.5, lines 22-29).

As to claims 3, Eidson discloses the claimed limitations "sending a write command that is configured to write a first value of a first real-time process control variable to the controller" by writing the interface specific configuration information in the device oriented interface database with appropriate values (col.5, lines 15-20); and "sending a read command that is configured to write a first value of a first real-time process control variable to the controller responsive to sending the write command that is configured to write the first value of the first real time process control variable to the controller" as reading the device specific information from the device dictionary and writing it to appropriate entries in the device oriented interface database (col.5, lines 43-47).

As to claims 4, Eidson discloses the claimed limitations "receiving a response from the controller responsive to sending the retrieved command to the controller" (col.6, lines 1-7); and "updating a status of the retrieved command sent to the controller in a command table in the database to indicate whether the retrieved command sent to the controller succeeded or failed" as updating the dictionary server attached to field bus as new process control device become available or modified in term of device specific information (col.5, lines 61-64).

As to claims 5, Eidson discloses the claimed limitation "updating the current value associated with the first real time process control variable in a tag in the table in the database with the first real time process control variable read from the controller responsive to receiving the response from the controller"as updating the dictionary server attached to field bus as new process control device become available or modified in term of device specific information (col.5, lines 61-64).

As to claims 12-16:

Claims 12-16 are for system claims performing the methods of claims 1-5. They are similarly rejected.

As to claims 23-27

Claims 23-27 are for computer readable medium containing instructions performed by the methods of claims 1-5. They are similarly rejected.

7.   Claims 6-11, 17-22 and 28-33 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Allowable Subject Matter

8.   Claims 6-11, 17-22 and 28-33 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

Reason for Indicating Allowable Subject Matter

9.   The present application has been thoroughly reviewed. Upon extensive and exhaustive

searches of various databases (see search notes in case jacket), the examiner respectfully submits

that the claimed feature --providing a tag table in the database that comprises definitions of a

plurality of real time process control variables, wherein each of the plurality of real time process

control variables is associated with a monitoring frequency and a current value; periodically

sending a read command that is configured to read a value of a real-time process control variable

for respective ones of the plurality of real time process control variables from the controller based

on the respective monitoring frequencies; and updating the respective current values for

respective ones of the plurality of real time process control variables with the respective values of

the real time process control variables read from the controller-- in the method, system and

computer program of claims 6, 17 and 28 respectively and in conjunction with all other limitations

of the dependent and independent claims would not found anticipated or obvious over the prior

art made of record.

Remark

(A).   Applicants asserted that the specification page 9, lines 13-17 describes the command

interface module (CIM), wherein the CIM may detect a command in the command table, retrieve

the command, and send the retrieved command to the controller via the command driver.

However, the specification page 9, lines 13-17 does not call for "the CIM retrieve a command and

then send the retrieved command to the controller driver".

(B).   Applicants asserted that none of the databases described in Eidson are used to store a

write or read command such that the stored command may be detected, retrieved and then sent to

a controller. The examiner disagrees with the precedent assertion. Eidson, however, provides a

mapper which includes a means for obtaining a set of information pertaining to the process

control (col.2, lines 53-56). Such a obtaining means of Eidson has the functional limitation of

reading and writing the commands that are stored in the database. More importantly, such a

functional limitation of Eidson would allow the use of detecting, retrieving and sending the

information to the controller. Eidson provides a mapping processor that reads the device specific

information from the device dictionary and then write the information to the appropriate entries in

the device-oriented interface database. This implication discloses the use to store a read and write

commands such that the stored command may be detected, retrieved and then sent to the

controller. The aforementioned assertion is moot, refer to the rejection above.

Conclusion

10.   THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this

final action.

Any inquiry concerning this communication or early communication from the Examiner

should directed to **Jean Corrielus** whose telephone number is (703) 306-3035. The Examiner can

normally be reached on the weekdays from 7:00am to 5:30pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, *Kim Vu,* can be reached on (703)305-9343.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 746-7239, (for formal communications intended for entry)
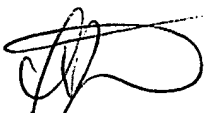
Art Unit: 2172:

Or:

<u>**(703)746-7240**</u> (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to <u>**Crystal Park II, 2021 Crystal Drive,**</u>

<u>**Arlington. VA., Sixth Floor (Receptionist).**</u>

Jean M. Corrielus

Patent Examiner

November 5, 2003